B) **IN THE CLAIMS**

1. (Currently Amended) A method for detecting and correcting tube spit comprising the steps of:

providing a CT system generator having a generator output;

monitoring the generator output from a CT system generator 102;

determining whether a tube-spit event occurred 104; and

if a tube spit occurred, performing tube spit correction 110.

2. (Original) The method of claim 1 wherein the step of determining whether a tube spit event has occurred includes the step of monitoring either the generator kV or mA waveforms 102.

3. (Original) The method of claim 2 further comprising the step of determining whether a tube spit event occurred comprises determining whether generator output dropped below a threshold value 104.

4. (Original) The method of claim 2 further comprising the step of setting a generator output threshold, wherein if the generator output falls below the threshold, a tube spit event is declared.

5. (Original) The method of claim 4 further comprising the step of determining the number of corrupted views that need to be corrected 106.

6. (Currently Amended) The method of claim 5 further comprising the step of providing a warning to ~~the~~ an operator if the ~~actual~~ number of corrupted views exceeds ~~the~~ a maximum allowable number of corrupted views.

7. (Currently Amended) The method of claim 6 further comprising the step of storing ~~the~~ a history and magnitude of tube spit occurrences.

8. (Currently Amended) The method of claim 7 further comprising the step of notifying the operator and/or service personnel of ~~the~~ a need to change the x-ray tube.

9. (Original) The method of claim 8 further comprising the step of using view interpolation between the two most recent good images to replace the corrupted views in between 110.

10. (Cancelled)

11. (Cancelled)

12. (Currently Amended) The method of claim 9 wherein the view interpolation is performed in accordance with:

$$P_{ij}(k+n) = ((n_{view}-n)/(n_{view}+1))P_{ij}(k-1) + ((n+1)/(n_{view}+1))P_{ij}(k+n_{view})$$

wherein $P_{ij}(k+n)$ is the projection at channel i, detector row j, view number k+n.

13. (Original) A processor programmed to

monitor the generator output from a CT system generator 102;

determine whether a tube-spit event occurred 104; and

if a tube spit occurred, perform tube spit correction 110.

14. (Original) The method of claim 13 wherein the step of determining whether a tube spit event has occurred includes the step of monitoring either the generator kV or mA waveforms 102.

15. (Original) The method of claim 14 further comprising the step of determining whether a tube spit event occurred comprises determining whether generator output dropped below a threshold value 104.

16. (Original) The method of claim 15 further comprising the step of setting a generator output threshold, wherein if the generator output falls below the threshold 104, a tube spit event is declared.

17. (Original) The method of claim 16 further comprising the step of determining the number of corrupted views that need to be corrected 106.

18. (Original) The method of claim 17 further comprising the step of providing a warning to the operator if the actual number of corrupted views exceeds the maximum allowable number of corrupted views.

19. (Original) The method of claim 18 further comprising the step of storing the history and magnitude of tube spit occurrences.

19. (Original) The method of claim 18 further comprising the step of notifying the operator and/or service personnel of the need to change the x-ray tube.

20. (Original) The method of claim 19 further comprising the step of using view interpolation between the two most recent good images to replace the corrupted views in between.

21. (Cancelled)

22. (Cancelled)

23. (Original) The method of claim 20 wherein the view interpolation is performed in accordance with:

$$P_{ij}(k+n) = ((n_{view}-n)/(n_{view}+1))P_{ij}(k-1) + ((n+1)/(n_{view}+1))P_{ij}(k+n_{view})$$

wherein $P_{ij}(k+n)$ is the projection at channel i, detector row j, view number k+n.

24. (Original) A method comprising the steps of:

providing an x-ray controller 28 for monitoring the output of a CT system generator;

providing a computer 36 to monitor the generator output from a CT system generator;

setting a voltage threshold that, if the voltage to the x-ray controller 28 falls below, a tube-spit event is declared;

determining the number of corrupted views 106;

warning the operator if the maximum number of corrupted views has been exceeded; and

if a tube spit occurred, performing tube spit correction 110.

25. (Cancelled)

26. (Currently Amended) The method of claim ~~[25]~~ 24 further comprising the step of storing the history and magnitude of tube spit occurrences.

27. (Original) The method of claim 26 further comprising the step of notifying the operator and/or service personnel of the need to change the x-ray tube.

28. (Original) The method of claim 27 further comprising the step of using view interpolation between the two most recent good views to replace the corrupted views in between 110.

29. (Cancelled)

30. (Cancelled)

31. (Original) The method of claim 28 wherein the view interpolation is performed in accordance with:

$$P_{ij}(k+n) = ((n_{view}-n)/(n_{view}+1))P_{ij}(k-1) + ((n+1)/(n_{view}+1))P_{ij}(k+n_{view})$$

wherein $P_{ij}(k+n)$ is the projection at channel I, detector row j, view number k+n

110.